

Appln No. 10/803,380
Amdt date August 31, 2006
Reply to Office action of June 1, 2006

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently amended) A plasma display panel apparatus comprising:
a first substrate;
a plurality of first electrodes provided in a row direction on the first substrate; and
a plurality of second electrodes provided in the row direction on the first substrate, at least one of said plurality of second electrodes being formed between ~~and common to~~ two adjacent first electrodes, defining first discharge cells with one of the two adjacent first electrodes, and further defining second discharge cells with the other of the two adjacent first electrodes, at least one of said plurality of first electrodes being formed between ~~and common to~~ two adjacent second electrodes,

wherein:

the at least one of said plurality of first electrodes and the at least one of said plurality of second electrodes face each other with a predetermined electrode gap therebetween;

a sustain discharge is generated by a voltage potential difference between the at least one of said plurality of first electrodes and the at least one of said plurality of second electrodes; and

an area of the at least one of said plurality of first electrodes is larger than that of the at least one of said plurality of second electrodes.

2. (Previously presented) The plasma display apparatus of claim 1, wherein:

the at least one of said plurality of first electrodes has a first protrusion formed in a column direction;

the at least one of said plurality of second electrodes has a second protrusion formed in the column direction;

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the first protrusion and the second protrusion face each other with the predetermined protrusion gap therebetween; and

an area of the first protrusion is larger than that of the second protrusion.

3. (Original) The plasma display apparatus of claim 2, wherein a column-directional length of the first protrusion is longer than a column-directional length of the second protrusion.

4. (Original) The plasma display apparatus of claim 2, wherein a row-directional width of the first protrusion is longer than a row-directional width of the second protrusion.

5. (Previously presented) The plasma display apparatus of claim 1, further comprising:

a second substrate facing the first substrate with a substrate gap therebetween; and
a plurality of third electrodes provided in the column direction on the second substrate,
wherein an address discharge is generated by a potential difference between at least one of said plurality of third electrodes and the at least one of said plurality of first electrodes.

6. (Previously presented) The plasma display apparatus of claim 1, wherein:

a first sustain pulse is applied to the at least one of said plurality of first electrodes and a second sustain pulse is applied to the at least one of said plurality of second electrodes in the sustain interval;

a voltage of the first sustain pulse is less than a voltage of the second sustain pulse in a first interval;

a voltage of the first sustain pulse is greater than a voltage of the second sustain pulse in a first interval; and

a voltage of the second sustain pulse in the second interval is less than a voltage obtained by subtracting a minimum voltage for generating a sustain from the voltage of the first sustain pulse.

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7. (Previously presented) The plasma display apparatus of claim 1, wherein:

a first sustain pulse is applied to the at least one of said plurality of first electrodes and a second sustain pulse is applied to the at least one of said plurality of second electrodes in the sustain interval; and

a first interval during which a voltage of the first sustain pulse is less than a voltage of the second sustain pulse is longer than a second interval during which a voltage of the first sustain pulse is greater than a voltage of the second sustain pulse.

8. (Original) The plasma display apparatus of claim 7, wherein a voltage of the second sustain pulse in the second interval is less than a voltage obtained by subtracting a minimum voltage for generating a sustain from the voltage of the first sustain pulse.

9. (Withdrawn) A method for driving a plasma display panel apparatus having a first electrode and a second electrode formed in parallel on a first substrate, and an address electrode crossing the first electrode and the second electrode and being formed on a second substrate, the plasma display apparatus generating an address according to a voltage potential difference between the first electrode and the address electrode, comprising:

in a sustain interval,

applying a first sustain pulse with a first voltage to the first electrode, and applying a second sustain pulse with a second voltage less than the first voltage to the second electrode to generate a sustain; and

applying a first sustain pulse with a third voltage to the first electrode, and applying a second sustain pulse with a fourth voltage greater than the third voltage to the second electrode to generate a sustain,

wherein:

the first electrode and the second electrode face each other with a predetermined electrode gap therebetween; and

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the first electrode has an area greater than that of the second electrode.

10. (Withdrawn) The method of claim 9, wherein the second voltage is less than a voltage obtained by subtracting a minimum voltage for generating a sustain from the first voltage.

11. (Withdrawn) The method of claim 9, wherein an interval during which the first sustain pulse has the third voltage is longer than an interval during which the first sustain pulse has the first voltage.

12. (Withdrawn) The method of claim 11, wherein the second voltage is less than a voltage obtained by subtracting a minimum voltage for generating a sustain from the first voltage.

13. (Withdrawn) The method of claim 9, wherein:
the first electrode and the second electrode respectively have protrusions; and
the protrusion of the first electrode has an area greater than that of the protrusion of the second electrode.

14. (Withdrawn) The method of claim 13, wherein the length of the protrusion of the first electrode is longer than the length of the protrusion of the second electrode.

15. (Withdrawn) The method of claim 13, wherein the width of the protrusion of the first electrode is greater than the width of the protrusion of the second electrode.